

## CLAIMS

1. An information recording medium preform used to manufacture an information recording medium which has a center mounting hole formed in a central part thereof, has at least one type of functional layer formed on a first surface thereof, and for which at least one of recording and reproduction of information is possible, wherein a second cavity that is formed as one of a circular recess and a ring shaped concave and composes part of the center mounting hole on the first surface side is formed in a central part of the first surface, and
  - a first cavity that is formed as a recess and composes part of the center mounting hole on a second surface on another side of the information recording medium is formed in a central part of the second surface.
2. An information recording medium preform according to Claim 1, wherein a corner part between an inner side surface forming the second cavity and the first surface is beveled.
3. An information recording medium preform according to Claim 1, wherein the second cavity is formed with a depth in a range of 50 to 150 $\mu\text{m}$  inclusive.
4. An information recording medium preform according to Claim 1, wherein a ring shaped concave whose outer diameter is equal to a diameter of an inner base surface of the first cavity, is formed in the inner base surface of the first cavity.

5. An information recording medium preform according to Claim 1, wherein a temporary center hole with a smaller diameter than an inner base surface of the first cavity, is formed in a central part of the inner 5 base surface of the first cavity.

6. An information recording medium preform according to Claim 5, wherein a cylindrical ring whose outer diameter is smaller than the center mounting hole and 10 whose inner diameter is equal to or larger than the diameter of the temporary center hole, and whose central axis matches or approximately matches a center of the temporary center hole is formed so as to protrude from the first surface.

15 7. A method of manufacturing an information recording medium comprising steps of: forming at least one type of functional layer on a first surface of an information recording medium preform, in a central part 20 of the first surface of which a second cavity has been formed as one of a ring shaped concave and a circular recess and in a central part of a second surface that differs to the first surface of which a first cavity has been formed as a recess; connecting the first 25 cavity and the second cavity by pressing in a cylindrical center hole punching out blade into an inner base surface of the first cavity along an inner side surface forming the first cavity to manufacture an information recording medium for which at least one of 30 recording and reproduction of information is possible and in a central part of which a center mounting hole, a first surface side part of which is composed of the second cavity and a second surface side part of which

is composed of the first cavity, is formed.

8. A manufacturing apparatus for forming an information recording medium, comprising:

- 5        a sputtering apparatus that forms at least one type of functional layer on a first surface of an information recording medium preform, in a central part of the first surface of which a second cavity has been formed as one of a ring shaped concave and a circular recess and in a central part of a second surface that differs to the first surface of which a first cavity has been formed as a recess;
- 10      a center hole forming device that connects the first cavity and the second cavity by pressing in a cylindrical center hole punching out blade into an inner base surface of the first cavity along an inner side surface forming the first cavity to manufacture an information recording medium for which at least one of recording and reproduction of information is possible
- 15      and in a central part of which a center mounting hole, a first surface side part of which is composed of the second cavity and a second surface side part of which is composed of the first cavity, is formed.
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